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EXAMINER

WACHSMAN, HAL D

ART UNIT PAPER NUMBER

2857

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/764,490

Applicant(s)

BARATY, MOHAMMAD REZA

Examiner

Hal D Wachsmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-51 and 92 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 and 92 is/are allowed.
- 6) ☒ Claim(s) 15-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

1. Claims 1-50 and 92 are objected to under 37 C.F.R. 1.75(a) for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claim 1, lines 6, 7, 9-11, 14 and 16, cite "said device" however the antecedent basis is "utility-consuming device". This same type of problem also occurs in claim 6, line 4, claim 7, line 3, claim 92, lines 5-7. Claim 1, line 13, cites "said measured output and input values" which it appears should be "said measured at least one output and at least one input values". Claim 1, line 15, cites "said utility service" which appears to lack clear antecedent basis. Claim 7, lines 1 and 2, cite "wherein receiving and storing" which it appears should be "wherein said receiving and storing". Claim 15, lines 4 and 7, cite "said device" however the antecedent basis is "programmable device". Claim 15, lines 9-10, cite "said usage" which lacks clear antecedent basis. Claim 15, line 11, cites "said utility" however the antecedent basis is "at least one utility". Claim 16, lines 3 and 6, cite "said device" however the antecedent basis is "programmable device". Claim 16, lines 6-7, cite "a specific load device" however is this the "load" previously cited in the claim? Claim 16, lines 9-10, cite "said utility service usage" which lacks clear antecedent basis. Claim 16, lines 11-12, cite "said utility service" which lacks clear antecedent basis. This same type of problem also occurs in claim 17, line 13. Claim 17, line 5, cites "the load" however the antecedent basis is "load device". Claim 27, line 2, cites "said representations of said utility service usage" however the antecedent basis is "said plurality of representations of said utility service usage". Claim 33, line 4, cites "utility service usage" which lacks clear antecedent basis. Claim 33, line 5, cites "the device" however the antecedent basis is "load device". Claim 33, line 10,

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cites "said usage" however is this referring to "utility usage" ? Claim 33, line 12, cites "said utility service" which lacks clear antecedent basis. Claim 34, line 6, cites "said load" however the antecedent basis is "load device". This same type of problem also occurs in claim 38, line 2, claim 40, lines 2 and 3. Claim 42, line 4, cites "said device" however the antecedent basis is "programmable device". This same type of problem also occurs in claim 43, line 3. Claim 42, lines 6 and 7, cite "said load" however the antecedent basis is "load device". This same type of problem also occurs in claim 43, line 7, claim 44, lines 7 and 10, claim 47, line 2, claim 49, lines 3 and 4. Claim 42, line 8, cites "said utility service" which lacks clear antecedent basis. The first line of claim 50 has a period after the word "claim" however that is not the end of the claim.

The examiner asks the applicant to better claim the limitations cited above. While the examiner understands the intentions of the applicant he feels confusion could be drawn from the limitations cited above. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 33-35, 37-43 and 51 are rejected under 35 U.S.C. 102(e) as being anticipated by Nierlich et al. (6,519,509).

As per claim 33, Nierlich et al. (abstract, figure 6, col. 5 lines 3-5, col. 6 lines 18-24, col. 7 lines 7-9, col. 16 lines 9-11, 63-67) disclose "a receiving means for receiving a representation of a utility usage....and a value of at least one output of the load device". Nierlich et al. (col. 6 lines 12-24, col. 9 lines 1-10, col. 16 lines 48-52) disclose "a receiving and storing means for receiving and storing a usage range representation". Nierlich et al. (Abstract, col. 6 lines 10-24, col. 9 lines 24-28, col. 10 lines 12-14, col. 11 lines 37-52, col. 12 lines 14-19, col. 17 lines 14-18) disclose the producing means as described in the last 4 lines of the claim.

As per claim 34, Nierlich et al. (Abstract, col. 6 lines 7-24) disclose the receiving step. Nierlich et al. (Abstract, col. 6 lines 66, 67, col. 7 lines 1-4, col. 10 lines 12-14, col. 11 lines 37-52) disclose the analyzing and interrupting steps.

As per claim 35, Nierlich et al. (Abstract, col. 6 lines 10-24, col. 9 lines 24-28, col. 10 lines 12-14, col. 11 lines 37-52, col. 12 lines 14-19, col. 17 lines 14-18) disclose the feature of this claim.

As per claim 37, Nierlich et al. (col. 4 lines 38-50, col. 8 lines 39, 40, col. 10 lines 12-14, col. 12 lines 14-19) disclose the feature of this claim.

As per claim 38, Nierlich et al. (see at least abstract) disclose the feature of this claim.

As per claim 39, Nierlich et al. (see at least abstract) disclose the feature of this claim.

As per claim 40, Nierlich et al. (see at least abstract) disclose the feature of this claim.

As per claim 41, Nierlich et al. (see at least abstract) disclose the feature of this claim.

As per claim 42, Nierlich et al. (Abstract, col. 1 lines 42-47, col. 6 lines 7-24) disclose the receive step. Nierlich et al. (Abstract, col. 6 lines 66, 67, col. 7 lines 1-4, col. 10 lines 12-14, col. 11 lines 37-52) disclose the interrupt step.

As per claim 43, Nierlich et al. (Abstract, col. 6 lines 7-24) disclose the receive step. Nierlich et al. (Abstract, col. 6 lines 66, 67, col. 7 lines 1-4, col. 10 lines 12-14, col. 11 lines 37-52) disclose the interrupt step.

As per claim 51, Nierlich et al. (Abstract, col. 6 lines 7-24) disclose "a receiving means... indicating that a usage of said utility service... is outside of a usage range representation". Nierlich et al. (Abstract, col. 6 lines 66, 67, col. 7 lines 1-4, col.

10 lines 12-14, col. 11 lines 37-52) disclose both the analyzing means and the interrupting means.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15-32, 44 and 46-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nierlich et al. (6,519,509) in view of Ehlers et al. (6,216,956).

As per claim 15, Nierlich et al. (col. 6 lines 12-24, col. 9 lines 1-10, col. 16 lines 48-52) disclose "receive and store...a usage range representation associated with the load device". Nierlich et al. (Abstract, col. 6 lines 10-24, col. 9 lines 24-28, col. 10 lines 12-14, col. 11 lines 37-52, col. 12 lines 14-19, col. 17 lines 14-18) disclose "produce a control signal for use by a utility service interrupter... operable to cause said utility service interrupter to interrupt a supply of said utility to said load device". Nierlich et al. (see at least abstract) disclose "receive in said device a representation of a measurement of at least one utility consumed by a load device" but does not explicitly disclose "and of at least one product of utilization of said at least one utility by said load device". However, Ehlers et al. (Abstract, figures 4, 5, col. 2 lines 35-39, col. 3 lines 14-25, 61-67) teach this excepted feature. It would have been obvious to a person of

ordinary skill in the art at the time the invention was made to apply the techniques of Ehlers et al. to the invention of Nierlich et al. as specified above because as taught by Ehlers et al. (col. 3 lines 14-16) it would provide the ability to balance environmental condition comfort with price and energy consumption management.

As per claim 16, Nierlich et al. (col. 6 lines 12-24, col. 9 lines 1-10, col. 16 lines 48-52) disclose "receive and store... a usage range representation associated with a specific load device....value of expected utility usage by the load device". Nierlich et al. (Abstract, col. 6 lines 10-24, col. 9 lines 24-28, col. 10 lines 12-14, col. 11 lines 37-52, col. 12 lines 14-19, col. 17 lines 14-18) disclose "produce a control signal for use by a utility service interrupter... operable to cause said utility service interrupter to interrupt a supply of said utility service to said load." Nierlich et al. (see at least abstract) disclose "receive in said device a measurement of a quantity of a utility consumed by a load" but does not explicitly disclose "and a measurement of at least one parameter indicative of an efficiency of the load". However, Ehlers et al. (col. 26 lines 59-62, col. 38 lines 33-36) teach this excepted feature. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Ehlers et al. to the invention of Nierlich et al. as specified above because as taught by Nierlich et al. (col. 1 lines 42-47) one means of achieving a sustainable supply of electric power in the future is to use **efficient end-use** technologies and energy efficiency programs that focused only on appliances, power plants, and equipment in the past now need to pursue other avenues of technology that increase the availability of energy and **improve supply and end-user efficiency**.



As per claim 17, Nierlich et al. (col. 6 lines 12-24, col. 9 lines 1-10, col. 16 lines 48-52) disclose "a data storage device operable to store said usage range representation". Nierlich et al. (Abstract, col. 6 lines 10-24, col. 9 lines 24-28, col. 10 lines 12-14, col. 11 lines 37-52, col. 12 lines 14-19, col. 17 lines 14-18) disclose "a controller, in communication with said communications device and said data storage device...to produce a control signal for use by a utility service interrupter, when said utility service usage is outside of said usage range representation....to cause said utility service interrupter to interrupt a supply of said utility service to said load". Nierlich et al. (Abstract, col. 6 lines 12-24, col. 9 lines 1-10, col. 16 lines 48-52) disclose "a communications device operable to receive a representation of utility service usage of a load device" but does not explicitly disclose "said representation of utility service usage comprising a measured value of at least one product of utilization of the load, the communications device also being operable to receive a usage range representation comprising an expected value of said at least one product of utilization". However, Ehlers et al. (Abstract, figures 4, 5, col. 2 lines 35-39, col. 3 lines 14-25, 61-67, col. 26 lines 59-62, col. 38 lines 33-36) teach this excepted feature. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Ehlers et al. to the invention of Nierlich et al. as specified above because as taught by Ehlers et al. (col. 3 lines 14-16) it would provide the ability to balance environmental condition comfort with price and energy consumption management.

As per claim 18, Nierlich et al. (col. 7 lines 16-46) disclose the feature of this claim.

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As per claim 19, Nierlich et al. (see at least abstract) disclose the feature of this claim.

As per claim 20, Nierlich et al. (Abstract, col. 6 lines 10-24, col. 9 lines 24-28, col. 10 lines 12-14, col. 11 lines 37-52, col. 12 lines 14-19, col. 17 lines 14-18) disclose the feature of this claim.

As per claim 21, Nierlich et al. (col. 6 lines 12-17, col. 10 lines 48-58) disclose the feature of this claim.

As per claim 22, Nierlich et al. (Abstract, col. 3 lines 3-8) disclose the feature of this claim.

As per claim 23, Nierlich et al. (col. 3 lines 7, 8, col. 4 lines 6-12, col. 6 lines 12-17, col. 10 lines 48-58, col. 11 lines 53-61, col. 12 lines 27-40) disclose the feature of this claim.

As per claim 24, Nierlich et al. (Abstract, col. 6 lines 12-24, col. 9 lines 1-10, col. 16 lines 48-52) disclose the feature of this claim.

As per claim 25, Nierlich et al. (col. 6 lines 12-24, col. 9 lines 1-10, col. 16 lines 48-52) disclose the feature of this claim.

As per claim 26, Nierlich et al. (Abstract, col. 6 lines 10-24, col. 9 lines 24-28, col. 10 lines 12-14, col. 11 lines 37-52, col. 12 lines 14-19, col. 17 lines 14-18) disclose the feature of this claim.

As per claim 27, Nierlich et al. (Abstract, col. 6 lines 10-24, col. 9 lines 24-28, col. 10 lines 12-14, col. 11 lines 37-52, col. 12 lines 14-19, col. 17 lines 14-18) disclose the feature of this claim.

As per claim 28, Nierlich et al. (Abstract, col. 6 lines 52-58) disclose the feature of this claim.

As per claim 29, Nierlich et al. (Abstract, figures 13, 24, col. 4 lines 51-56, col. 7 lines 1-4, 9-12) disclose the feature of this claim.

As per claim 30, Nierlich et al. (col. 6 lines 66, 67, col. 7 lines 1-4, 9-15, col. 8 lines 1-9, 35-45, col. 11 lines 37-61, col. 16 lines 57-62) disclose the feature of this claim.

As per claim 31, Nierlich et al. (figure 23, col. 4 lines 51-56, col. 7 lines 1-4, 9-12, col. 8 lines 1-9, 33-45) disclose the feature of this claim.

As per claim 32, Nierlich et al. (see at least abstract) disclose the feature of this claim.

As per claim 44, Nierlich et al. (Abstract, col. 6 lines 66, 67, col. 7 lines 1-4, col. 10 lines 12-14, col. 11 lines 37-52) disclose "a utility service interrupter...operable to interrupt the supply of said utility service to said load in response to said control signal". Nierlich et al. (Abstract, col. 6 lines 7-24) disclose "a communications device..to receive a control signal...usage of said utility service...is outside of a usage range representation associated with the load device" but does not explicitly disclose "the usage range representation comprising data selected from the group consisting of an efficiency rating, a flow rating and a quantity of a secondary by-product of said load". However, Ehlers et al. (Abstract, figures 4, 5; col. 2 lines 35-39, col. 3 lines 14-25, 61-67, col. 26 lines 59-62, col. 38 lines 33-36) teach this excepted feature. It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to apply the techniques of Ehlers et al. to the invention of Nierlich et al. as specified above because as taught by Ehlers et al. (col. 3 lines 14-16) it would provide the ability to balance environmental condition comfort with price and energy consumption management and because as taught by Nierlich et al. (col. 1 lines 42-47) one means of achieving a sustainable supply of electric power in the future is to use **efficient end-use** technologies and energy efficiency programs that focused only on appliances, power plants, and equipment in the past now need to pursue other avenues of technology that increase the availability of energy and **improve supply and end-user efficiency**.

As per claim 46, Nierlich et al. (col. 4 lines 38-50, col. 8 lines 39, 40, col. 10 lines 12-14, col. 12 lines 14-19) disclose the feature of this claim.

As per claim 47, Nierlich et al. (see at least abstract) disclose the feature of this claim.

As per claim 48, Nierlich et al. (see at least abstract) disclose the feature of this claim.

As per claim 49, Nierlich et al. (see at least abstract) disclose the feature of this claim.

As per claim 50, Nierlich et al. (see at least abstract) disclose the feature of this claim.

6. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nierlich et al. (6,519,509) in view of Flig et al. (4,841,287).

As per claim 36, Flig et al. (see at least abstract) teach the feature of this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Flig et al. to the invention of Nierlich et al. as specified above because Nierlich et al. teaches electrical utility service interruption just as is accomplished in Flig et al. which can cut-off not only electrical utility service but gas and water utilities as well.

7. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nierlich et al. (6,519,509) in view of Ehlers et al. (6,216,956) as applied to claim 44 above, and further in view of Flig et al. (4,841,287).

As per claim 45, Flig et al. (see at least abstract) teach the feature this claim. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the techniques of Flig et al. to the inventions of Nierlich et al. and Ehlers et al. as specified above because Nierlich et al. teaches electrical utility service interruption just as is accomplished in Flig et al. which can cut-off not only electrical utility service but gas and water utilities as well.

8. Claims 1-14 and 92 are allowed subject to the appropriate correction of the 37 C.F.R. 1.75(a) objections noted in paragraph one above.

9. Applicant's arguments filed 3-8-04 have been fully considered but they are not persuasive with respect to the claims that remain rejected above and have been rendered moot with respect to the new grounds of rejection applied above. The Examiner respectfully notes though that with respect to the Nierlich et al. reference although arguments were presented with respect to claim 1, the specific features of the

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other independent claims that remain rejected above were not addressed (37 C.F.R. 1.111). In addition, no arguments were presented with respect to the Flig et al. reference (see 37 C.F.R. 1.111) which was applied prior art.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal D Wachsman whose telephone number is 571-272-2225. The examiner can normally be reached on Monday to Friday 7:00 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hal D Wachsman  
Primary Examiner  
Art Unit 2857

HW  
May 24, 2004